

Agenda
National Earthquake Prediction Evaluation Council (NEPEC)
2 – 3 September 2015, Southern Methodist University, Dallas, Texas

Main topics:

- USGS OEF priorities, user needs, and Powell Center project plans (Blanpied, Jones, Field)
- USGS development of the aftershock forecasting tool (Hardebeck, Field)
- Lessons learned from Nepal aftershock forecasting (Michael, Wein)
- Progress in geodetic transient detection (Murray, Roeloffs)
- Development of methods for forecasting and hazard in areas subject to IS (TBD)

Desired outcomes:

1. Statement from NEPEC on proper posing and testing of predictions, with USGS & NEPEC roles.
2. Review and endorsement of aftershock forecasting methodology.
3. Recommendations on USGS development of OEF methods and products to meet user needs.
4. Recommendations on USGS priorities in R&D and operationalization of improved forecasting.

Day 1 (September 2, 2:00 to ~6:30 PM)

Location: McGuire Building on SMU campus, room 253 {note room change}

Introduction:

- 2:00 Welcomes, introductions, agenda, FACA guidelines (SMU, Tullis, Blanpied)
- 2:20 Status of OEF strategic planning and debate on need for OEF (Blanpied)
- 2:45 Role of OEF in the USGS strategic plan for Natural Hazards (Jones)
- 3:00 Discussion

Aftershock forecasting following the Nepal Earthquake:

- 3:20 Forecasting aftershocks of the Gorkha, Nepal earthquake (Michael)
- 3:45 Lessons learned from Christchurch and application to Nepal (Wein)
- 4:00 *Break*

What forecasts are needed by users?:

- 4:15 Results of Powell Center user-needs workshop (Field)
- 4:45 Perspectives on uses and communication of hazard and risk information and products (Wein)
- 5:00 Discussion on user needs, USGS roles and priorities

Research on and testing of predictions:

- 6:00 CSEP & CISM – Center for Interseismic Simulation and Modeling (Jordan)
- 6:15 Discussion
- ~6:30 *Adjourn. Group dinner for those desiring*

Day 2 (September 3, 8:30 AM to ~5:00 PM)

Location: Fincher Building on SMU campus, Ernst & Young Gallery, room 220

NEPEC as a Federal Advisory Committee:

8:30 Ethics rules for Special Gov't Employees and protection from liability (Baumgartner)

Aftershock forecasting:

9:15 Updated method for forecasting aftershocks (Hardebeck, Field)

9:40 Discussion: NEPEC endorsement of aftershock forecasting methodology

Developing a full rupture forecast model that includes spatiotemporal clustering:

10:00 Development of UCERF3-ETAS (Field)

10:30 *Break*

Induced seismicity hazard

10:45 North Texas seismicity and induced seismicity science (DeShon)

11:00 Induced seismicity hazard, one-year hazard map (Moschetti)

11:15 Induced seismicity hazard in Canada (Atkinson)

11:30 Discussion of induced seismicity and related hazards

12:00 *Lunch*

Looking ahead – forecasting capabilities and USGS priorities

1:30 Geodetic transient detection (Roeloffs, Murray by phone)

2:00 Discussion: USGS priorities in OEF

3:00 *Break*

NEPEC statement

3:15 Discussion of draft NEPEC statement (Tullis & Blanpied)

Updates on topics of ongoing interest

3:45 Brief updates on:

- Report out from SESAC meeting, other program news (Leith & Blanpied)
- QuakeFinder (Blanpied)
- Forewarnings report and PNW communications plan (Blanpied)

Concluding discussions

4:15 Wrap-up discussions, completion of NEPEC statement, planning future business (NEPEC)

~5:00 *Adjourn*